Montana Department of
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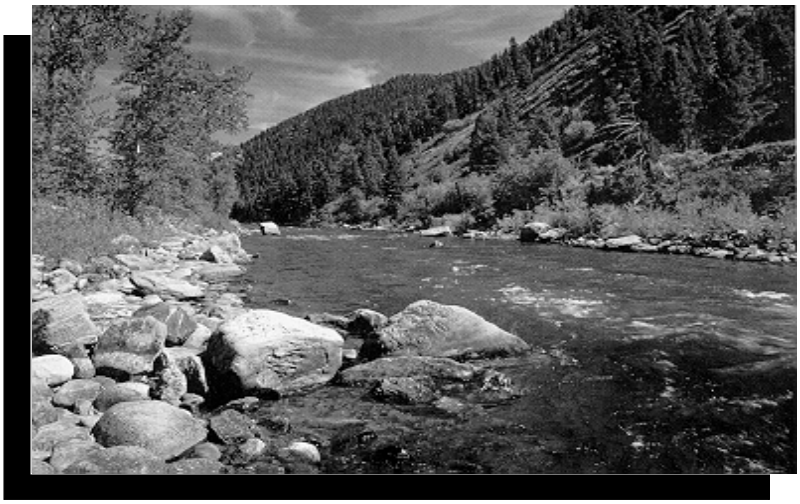

"Rivers shape our lives, the forms of our recreation, our industries, and the character and location of our major cities. They give life to us and they take our wastes. Thus, their conditions reflect what we think about ourselves and the land."

by Hal Salwasser and Rita Cantu

This newsletter is published by the Montana Department of Environmental Quality (DEQ) in an effort to share information with local watershed planning groups. Local groups are encouraged to share their success stories with others working in Montana to improve and protect water quality. To publish an article in the newsletter contact Roxann Lincoln at (406) 444-7423.

Montana Rancher Wins Environmental Stewardship Award

by Roxann Lincoln

Ray and Sue Marxer are this year's winner of the National Cattleman's Beef Association Environmental Stewardship Award. The Marxers manage the Matador Cattle Company near Dillon, Montana. The ranch is a 6,500-cow/calf pair and 800 stocker cattle operation on 250,000 acres just over the Continental Divide.

Ray is committed to balancing productivity with environmental quality in managing the ranch. Ray states "We don't do anything that every other producer across the United States can't do. It is possible to have both productivity off the land and a healthy environment."

The Marxers use a planned grazing system which has the benefits of reducing soil erosion and increasing the quality and quantity of forage. A three pasture rest rotation system is a part of the grazing management plan. According to Marxer, from 1990 to 1999, the Matador has increased the carrying capacity from 6,000 to over 7,000 animals using fewer employees. The management program has reduced substitute feed costs by one-third and has increased the weaning weight by 140 pounds.

Congratulations to the Marxers for a job well done. For more information see ***Conservation Voices****. April/May 1999, pages 10-13.*

Montana Carbon Offset Coalition to Hold National Carbon Sequestration Conference

The Montana Carbon Offset Coalition will host a national conference, ***"Exploring Opportunities for Carbon Sequestration,"*** October 26-28, 1999, in Missoula, Montana. The conference will inform and educate Montana and the nation on the issues, opportunities, and concerns surrounding carbon sequestration. Carbon can be sequestered, or stored, by planting trees or other vegetation. Growing concern over the possibility of climate change caused by carbon dioxide and other greenhouse gases has become a new reason to plant trees.

The Montana Carbon Offset Coalition is a partnership of Montana RC&D's, The Confederated Salish and Kootenai Tribe and Montana Watershed, Inc., a conservation district sponsored non-profit designed to implement market based conservation programs. These projects, in addition to sequestering carbon, will improve water quality, improve soil health, decrease soil erosion, and enhance the sense of community in our urban areas.

Session topics include: The Science of the Greenhouse Effect, Forest, Soil and Cropland Carbon Sequestration; Emergence of the Carbon Credit Market: A Win-Win for U.S. Agriculture; An In-Depth Look at Current and Future Policy; Issues and Concerns on Carbon Sequestration: Agency Perspectives, Agricultural Commodity, Environmental Conservation Groups; and Innovation and Economics: Tools of Carbon Sequestration Projects.

The conference is open to all who wish to attend. National speakers will cover all aspects of national and international policy and the science of forest, soil, and cropland carbon sequestration. Model programs will be discussed and panels will highlight the opinions of groups both for and against the Kyoto Protocol and its impact on U.S. Agriculture and the U.S. Economy.

For more information on the conference, or to request registration materials, please contact **Kit Sutherland, Bitter Root RC&D, Inc. (406) 363-5450, ext. 118.**

For more information on carbon sequestration and the Montana Carbon Offset Coalition please contact, **Ted Dodge, Conservation Partnership Coordinator (406) 587-6965 or Karen Reiter, Assistant Statewide RC&D Coordinator (406) 587-6965.**

The Upper Clark Fork River Basin Steering Committee

from *"Resolving the Paradox of Environmental Protection*"

In 1988, the Northern Lights Institute, a small nonprofit organization in Missoula organized a committee of ranchers, environmentalists, businesses, and officials of state and local government to study the state of the upper Clark Fork River. In January 1991, that committee asked the Montana state legislature to suspend normal processes for allocating water rights until the committee could write a management plan for the river. The legislature agreed and did adopt the plan when the committee submitted it four years later. The legislature also asked the committee to stay in business to monitor implementation and to address new issues that might emerge in the watershed.

The Upper Clark Fork River Basin Steering Committee was an early example of what has become a flood of similar local efforts to resolve environmental conflicts. Government agencies and experts call those collaborative local efforts by many names, including *"community-based environmental protection"* and *"civic environmentalism,"* and are encouraging them as the center piece of agency efforts to address environmental issues comprehensively in watersheds, communities, and ecosystems.

Community-based environmental protection is different from traditional ways of involving the public in three respects: its *ad hoc,* place-specific focus; its collaborative approach and direct involvement of citizens in framing decisions; and its broad, multi-agency scope. Those three characteristics take community-based approaches into territory that traditional advisory committees, public hearings, and interagency planning have not explored.

In the upper Clark Fork River, the impetus to come together came from a desire to avoid costly, divisive litigation. The Steering Committee embraced a disciplined process, led by a professional facilitator, of searching for common interests. It succeeded by tapping a reservoir of entrepreneurial leadership, technical skills, and political will. In addition, the state legislatures unusual role in the process helped the group focus on its work.

The Steering Committee designed a way to allow water that was being used for agricultural irrigation to be left in the river to support fisheries. The committee also developed a project which will remove a large source of nutrient pollution from the river, and

it designed two studies which have made significant contributions to understanding water management.

In 1998 the Steering Committee decided to take the lead with assisting local groups and residents interested in developing Total Maximum Daily Loads (TMDLs). Two pilot projects are currently underway, one on Racetrack Creek and another on Fred Burr Creek.

Successful Watershed Initiatives

by David H. Getches

What does it take for a watershed initiative to be successful? First, my conclusions drawn from the cases show that there are four ingredients that a watershed effort needs to succeed. They should not be controversial and they may provide good advice for people interested in making the watershed experiment work; if these elements exist, you are likely to succeed; if they do not you should remedy the situation or risk wasting a lot of time.

Clear Focus: Usually, a specific problem within the watershed motivates the participants to create the watershed management effort. Efforts to solve problems that are too complex, too controversial, or that involve too many factors outside the control of the watershed group will almost surely end with disappointment, frustration and failure. Picking a "do-able" project to start with can help build group capacity and momentum to tackle larger projects. But if the group pursues goals that are too modest or that will not produce tangible results, the participants may lose interest.

Committed Participants: The effort is not likely to succeed in affecting the way that resources of the watershed are used and managed unless its members have a strong commitment to the group. The participants must see the group as a comfortable, safe forum in which to present and exchange opinions, perspectives, and values.

Commitment builds as participants gain trust in one another and in their ability, as a group, to solve problems. Discovering their common dedication to the place or to the shared values encourages this trust. Proceeding by consensus—rather than making decisions by slim majority votes—makes it easier for people to feel committed to the group.

Leadership Capacity: The group must have members with competency, drive, credibility, creativity, and charisma to lead the effort and make things happen. These strengths can come from one or two individuals or from several who can pool diverse leadership qualities. Because comprehensive solutions to watershed problems typically require broad, systems-based thinking, groups need people capable of taking a watershed, rather than an individual resource, approach. Comprehension of the watershed as a natural unit can be developed through experience in the group, but at least a few members of the group need to start with the "big" picture.

Sound Structure and Process: Group structure can be tailored to the needs of the participants, and should remain flexible so the group can adapt to changing needs. There are, however, several factors that have to be addressed.

Representation: The group must ensure that participation is broad and representative, including everyone necessary to accomplish the group's goals.

Ground rules: Acceptance of the ground rules by all participants establishes trust and is a first "accomplishment."

Decision making: Most successful groups make decisions by consensus, though sometimes the desire to find consensus among the entire group must be balanced against the need to prevent the effort from bogging down.

Facilitation: Having a neutral party serve as a facilitator helps create an atmosphere in which diverse groups are comfortable presenting their views.

External relations: The group needs to set up linkages with outside parties, organizations, and basin residents. This is important for fund-raising, for gathering and disseminating information, and for influencing formal decision-making processes.

David H. Getches is a Professor of Natural Resources Law at the University of Colorado School of Law. Prior to joining the Colorado Law faculty, Professor Getches served as the Executive Director of the Colorado Department of Natural Resources and was the Founding Executive Director of the Native Americans Rights Fund. Professor Getches currently chairs the Board of Directors of the Land and Water Fund of the Rockies, and serves on boards and committees for several other organizations.

Following is a list of active watershed groups in Montana:

- Big Hole Watershed Committee
- Big Spring Creek Watershed Partnership
- Bitterroot Water Forum
- Blackfoot Challenge
- Buffalo Rapids Watershed Project
- Bullhead Water Quality Project
- Careless Creek Watershed
- Cedar Creek Watershed Project
- Deep Creek Watershed
- Devil's Kitchen Management Team
- East Pioneer Experimental Stewardship Committee
- Elk Creek Watershed Council
- Flathead Basin Commission
- Flint Creek Watershed
- Kootenai River Network, Inc.
- Lake Creek Partnership
- Lonesome Lake Coordinated Resource Management (CRM) Group
- Lower Missouri River - Coordinated Resource Management Council
- Mineral County Watershed Council
- Neveda Creek Watershed
- Prospect Creek Watershed Council
- Rock Creek Trust
- Ruby Valley Watershed Program
- Snowline Grazing Association - CRM
- Sun River Watershed
- Teton River Basin Resource Group
- Tri-State Implementation Council
- Upper Clark Fork River Basin Steering Committee
- Upper Tenmile Watershed Steering Group

For more information concerning these groups, visit the web at: **http://water.montana.edu/WaterNet/watershed/groups/default.htm**

USGS Releases Report

The U.S. Geological Survey (USGS) recently released a report *"The Quality of our Nation's Waters"* that details the results of ground water and surface water sampling from across the country. According to the report, more than 90 percent of water and fish samples from all streams contained one or more, often several, pesticides. About 50 percent of the wells sampled contained one or more pesticides.

The most frequently detected pesticides are those most heavily used, now or in the past: atrazine, deethylatrazine, metolachlor, cyanazine, alachlor, EPTC, simazine, prometon, 2,4-D, diuron, tebuthiuron, diazinon, carbaryl, malathion, and chlorpyrifos. Organochlorine insecticides were highest in urban streams and where historical agricultural use was greatest.

At about 30 percent of the sampled sites, insecticide concentrations in whole fish exceeded human-health guidelines for edible fish tissue.

Yellowstone River Corridor to be Studied

by Jim Robinson, DNRC

Through agreement with the Park Conservation District and the Department of Natural Resources and Conservation (DNRC), the Governor's Upper Yellowstone River Task Force is preparing to conduct an investigation into the cumulative effects of bank stabilization projects on the upper Yellowstone River. The study reach will be from Gardiner to Springdale, a total distance of about 80 river miles.

The first step in the investigation will be detailed topographic mapping of the river channel and floodplain. The maps will be made from aerial photographs. Survey markers will be placed on public and private land adjacent to the river in preparation for taking the photos.

A public meeting was held in Livingston on March 18, 1999 to discuss the purpose of the aerial photography and the need to place aerial survey markers in order to gain accurate information. Jim Robinson, water resources planner at DNRC, is gathering information or old photos of past flooding and channel changes on the river. Anyone who would be willing to share knowledge or loan photos, please contact Jim at (406) 444-4247.

Transportation Equity Act: Not Just For Highways

from *Watershed & Wet Weather Technical Bulletin (April 1999)*

The Transportation Equity Act of the 21st Century (TEA-21) funds not only transportation projects for the early part of the next century, but also has provisions that benefit environmental projects.

The act builds on initiatives established through the Intermodal Surface Transportation Act (ISTEA) of 1991 and combines ISTEA programs with new initiatives to improve highway safety, enhance communities and the environment, and advance economic growth through efficient and flexible transportation.

A number of TEA-21 provisions could be used to protect water quality:

- *Transportation enhancements.* These can be used to improve communities' cultural, aesthetic, and environmental characteristics and are funded at $3.3 billion over 6 years. Activities under the provision could include mitigation of water pollution from highway runoff, bridge scraping, and gravel road grading.

- *Environmental restoration and pollution abatement.* State transportation departments can spend up to 20 percent of the cost of reconstructing, rehabilitating, resurfacing, or restoring a transportation facility to address water pollution associated with current or past projects.

- *Wetlands restoration and mitigation banking.* Funds can be used to address wetlands losses caused by federally aided transportation projects.

- *Environmental streamlining.* Federal agencies are required to streamline environmental review of transportation projects.

- *Transportation and community system preservation pilot*. A total of $120 million over 6 years is earmarked for a pilot project to encourage states and local agencies to integrate transportation and community planning.

- Transportation-environment cooperative research program. This program funds research on the relationship between highway density and ecosystem health.

The act does not guarantee funding for specific environmental measures, according to Fred Bank, an ecologist for the Environmental, Natural, and Cultural Resources Team of the Federal Highway Administration. TEA-21 funds are distributed to state transportation departments, which determine how funds are distributed locally, he says.

Interesting Websites

1. **www.epa.gov**/cleanwater – from this website you can review the federal Clean Water Action Plan.
2. **www.montana.edu/wwwpb/ag/stream.html** – review the article "Monitoring Streambank Stability: Grazing Impacts or Stream Variablity?" and other publications.
3. **www.YSI.com – review the article "Who's Minding the Plant?" by Wesley M. Jarrell, Phd. which discusses TMDLs.**
4. **www.epa.gov/seahome/grants.html** – an on- line tutorial for applying for federal grants.
5. **www.crrel.usace.army.mil/ierd/scour** – review real time monitoring of sedimentation for the Missouri River in Montana.
6. **www.terraserver.com** – new website that can put satellite imagery on your PC. Much of Montana is available. Some of the place names may be in Russian.
7. **www.nhq.nrcs.usda.gov/BCS/nutri/manage.html** – view the USDA-NRCS Revised Nutrient Management Standard and Policy
8. **www.mtim.org** – Agrimet website for crop consumptive use for stations around Montana. Also temperature and other useful information are available for crop management.

Conferences

Montana Chapter of the Soil and Water Conservation Society (SWCS) Annual Conference

New Directions in Buffers: Common Sense Conservation is the theme for this years conference to be held in Billings November 8-9, 1999. The conference will be held at the Holiday Inn and will focus on the specific benefits of conservation buffers, practice implementation in Montana landscapes, rancher testimonials, and programs available for implementing conservation buffers.

For more information contact Valerie Oksendahl at (406) 538-7401 ext. 117, or write her at 211 McKinely Street, Suite 3, Lewistown, MT 59457.

Products

The Spray Saver – is a device that can help farmers protect important buffer strips. The patented, adjustable mercury switch attaches to the three point hitch of a tractor and allows the operator to automatically and precisely cut off the flow of chemicals at turn rows as the implement is raised. The concept is simple: Tractor implement up, spray off. Implement down, spray on.

The device prevents the spray of substantial amounts of unnecessary chemical onto fields and ultimately into streams. Imperfect spray methods can cause chemical drift which in turn damages valuable buffer strips at turn rows.

The cost is $99.50.

For more information visit their website at www.thespraysaver.com or call 1-800-840-8054.

Notice: DEQ doesn't endorse any products advertised in this newsletter. DEQ is only sharing information on products that might improve water quality.